

CASE NO.: HSI920030207US1
Serial No.: 10/670,948
September 28, 2005
Page 5

PATENT
Filed: September 25, 2003

Remarks

All pending claims (1-14) have been rejected under 35 U.S.C. §103 as being unpatentable over Bement et al., USPN 6,765,765 in view of Keleman, USPN 6,757,124.

To overcome the rejections, Claim 1 has been amended to recite that the HDD controller executes a program to actuate the RSA bias mechanism to establish a zero RSA during read and write operations and to otherwise establish a non-zero RSA during ramp load and unload operations as shown in, e.g., figures 2, 3, and 5. Independent Claim 7 now recites that the controller actuates the RSA bias mechanism to establish a RSA based on making a determination whether the slider is being loaded/unloaded or is in data communication with the disk. And, independent Claim 11 now sets forth that the RSA biasing means is actuated to establish a RSA of the data transfer means depending on whether or not the data transfer means is being loaded/unloaded, and that the logic means is programmed to establish a non-zero RSA wherein an inner edge of the data transfer means is higher relative to the data storage means than is an outer edge of the data transfer means during load/unload, with the logic means also being programmed to establish a zero RSA of the data transfer means when the data transfer means is communicating with the data storage means. Claims 3-5, 8, 12, and 13 have been canceled. Claims 1, 2, 6, 7, 9-11, and 14 remain pending.

Rejections Under 35 U.S.C. §103

Claims 1, 2, 6, 7, 9-11, and 14 have been rejected under 35 U.S.C. §103 as being unpatentable over Bement et al., USPN 6,765,765 in view of Keleman, USPN 6,757,124. Bement et al. teaches using Nitinol wires to correct for departures from the design RSA (of unstated value) that are due to manufacturing tolerances and variations. Nowhere does Bement et al. consider different RSAs for the different situations

1159-16.AM2

CASE NO.: HSJ920030207US1

Serial No.: 10/670,948

September 28, 2005

Page 6

PATENT

Filed: September 25, 2003

of data transfer and load/unload, nor does Bement et al. discuss establishing any particular RSA orientation apart from some unstated "design" orientation, which could be anything for all Bement et al. teaches.

Keleman is primarily directed to using piezoelectric elements to establish a desired fly height of the slider. However, at col. 8 Keleman discusses twisting the suspension as necessary to null out rolls caused by rapid motion of the suspension (line 7), and to null out slider roll during load and unload (line 13). Like Bement et al., however, Keleman does not consider different RSAs for the different situations of data transfer and load/unload, but only nulling out slider rolls of unstated direction during both rapid slider movement and load/unload. Moreover, in its discussion in lines 16-32 of nulling out roll during load/unload, Keleman gives no indication as to whether the left side 902 in figure 9 is the inner or outer edge, but states only that the left side 902 can be moved higher or lower than the right side 904 presumably in accordance with the teachings at line 13 to cancel out slider roll, as opposed to establishing any particularly desired RSA for the purpose of load/unload. This means that Keleman does not teach establishing a non-zero RSA during load or unload, but only counteracting unwanted roll of unstated direction to achieve some unstated, possibly zero RSA by appropriately moving the sides 902, 904 relative to each other, i.e., Keleman does not state what the RSA is after moving the sides 902, 904, but only that the unwanted roll of unstated direction has been canceled.

With these distinctions in mind, combining the references as proposed would result at most in nulling out unwanted slider rolls without distinguishing whether the slider rolling is due to being rapidly moved during data transfer or to being loaded/unloaded as taught by Keleman, and in nulling out departures from an unstated design RSA regardless of the particular operational situation as taught by Bement et al.

Accordingly, neither reference teaches or suggests:

1189-16.AM2

CASE NO.: HSJ920030207US1

Serial No.: 10/670,948

September 28, 2005

Page 7

PATENT

Filed: September 25, 2003

(1) establishing RSA based on a determination of whether the slider is transferring data or whether it is being loaded/unloaded (Claims 7 and 11);

(2) establishing any particular RSA orientation, much less a zero one during data transfer and a specific non-zero RSA during load/unload (Claim 1 for zero/non-zero difference and Claims 6, 9, and 11 for a specific non-zero RSA).

In addition, the examiner has alleged that it would be obvious to the skilled artisan to establish a zero RSA during data transfer. No evidence has been pointed to in support of this conjecture and indeed it appears that only the present specification has explicitly made that observation. Regardless, the references even if combined as proposed would not result in the determination of Claims 7 and 11 or the particular RSA differences reflected in the claims, depending on the operational state of the slider.

The Examiner is cordially invited to telephone the undersigned at (619) 338-8075 for any reason which would advance the instant application to allowance.

Respectfully submitted,



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1189-16.AM2